OCR
RECOGNISING ACHIEVEMENT

14-19 CHANGES
A LEVEL

New A Level Computing

H047 and H447 replacing 3820 and 7820

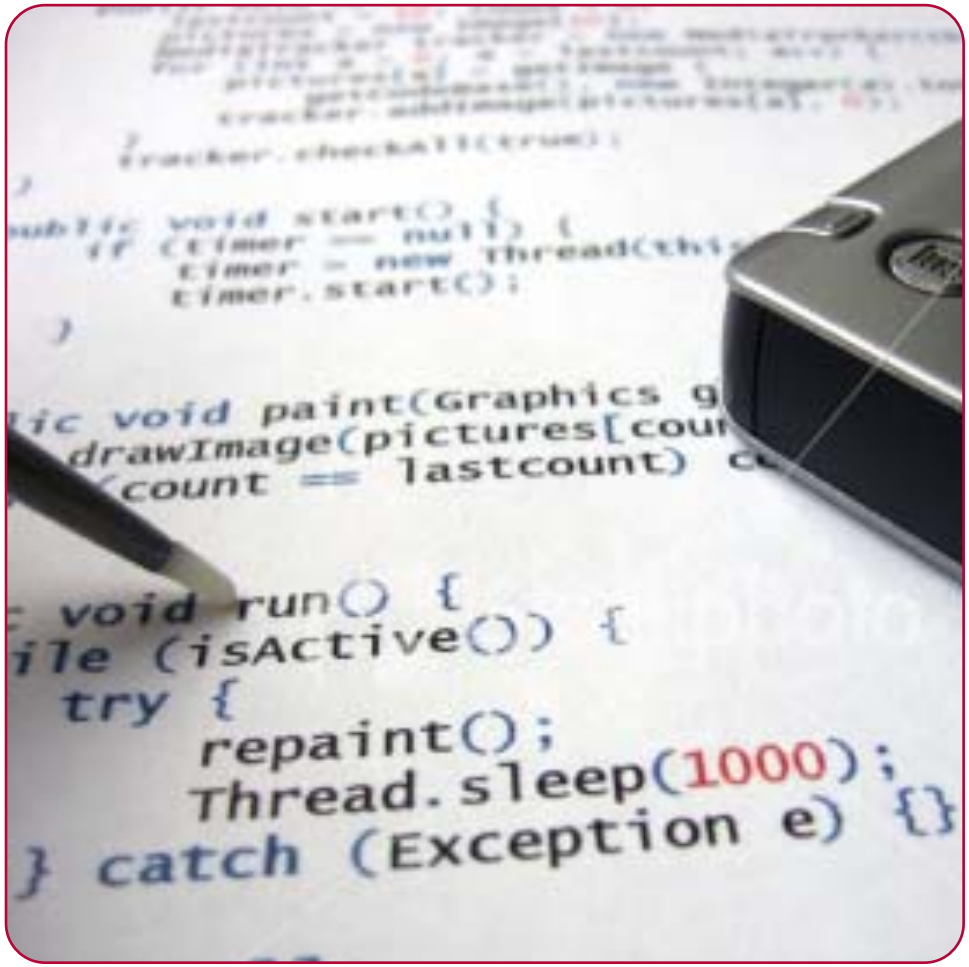
Information for OCR centres transferring to **new specifications for first teaching in September 2008**

This document maps the current A Level Computing specification to the new specification for first teaching in September 2008. It includes information on the changes, support available and an outline of the new specification. It is intended to help ease the transition for Heads of Department and Teachers involved in the teaching of Computing.

The full specification is available online along with a short questionnaire enabling you to share your comments on the specification and help shape the materials developed to support it. For more information including answers to frequently asked questions visit **www.ocr.org.uk/14-19alevels**

Current specification – mapping the changes **pages 2-3**

Outline specification for first teaching September 2008 **page 4**



QCA have stipulated that:

- Number of units required to achieve GCE A Level Computing is to be reduced from six to four
- Coursework is set at 20%
- Stretch and Challenge style questions to be introduced into A2 assessment

Mapping the changes to the A Level Computing specification for first teaching September 2008

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Existing specification

Candidates must complete six units

	Current unit title	Unit code	What remains the same?	What is changing?	Why is it changing?	Guidance
AS	**Introductory Computer Systems, Communications and Software**	**2506** Mandatory 30% (AS) 15% (A Level) 1hr 30mins exam	• All of this unit has been retained, however this now forms part of two new units - elements can now be found in the new unit 1, Computer Fundamentals, and the new unit 2 – Programming Techniques and Logical Methods. Now included in Computer Fundamentals: • Components of a computer system. • hardware. • software. • data (presentation, structure and management). Now included in Programming Techniques and Logical Methods: • solutions to problems. • procedural programs. • data types/structures. • procedural languages. This remains an exam based unit.	• This unit now forms part of the new Unit 1 and Unit 2. • No change to the style of questions or paper. • New unit code F451 & F452.	• QCA has stipulated that the number of units needs to be reduced from six to four.	• The new specification will have detailed Specimen Assessment Materials on the examinable units.
AS	**Structured Practical Computing Tasks**	**2507** Mandatory 40% (AS) 20% (A Level) Coursework	• This unit has now been removed. Coursework for this specification has been limited to 20% by QCA. OCR has decided to retain the coursework at A2. • Some of the content that can be externally examined may be found in Unit F452.			
AS	**Computer Systems Development & Practical Applications**	**2508** Mandatory 30% (AS) 15% (A Level) 1hr 30mins exam	• Elements of this unit have been retained and is now part of the new unit 1- Computer Fundamentals. Staying the same: • Systems development life cycle. • Characteristics of information systems. • Implications of computer use.	• Sections within this unit have been removed including, Handling of data and designing the user interface. • New unit code F451 & F452.	• Changes have been made to ensure the focus of the unit is more computer-based rather than ICT based, creating two distinct qualifications.	• The new specification will have detailed Specimen Assessment Materials on the examinable units.

continued

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	Existing specification					
	Current unit title	**Unit code**	**What remains the same?**	**What is changing?**	**Why is it changing?**	**Guidance**
A2	**Systems Software Mechanisms, Machine Architecture, Database Theory and Programming Paradigms**	**2509** Mandatory 15% (A Level) 1hr 30mins exam	• All of this unit has been retained – this is now the new unit 3, Advanced Computing Theory.	• This unit has not been changed as customer feedback has shown that this unit is popular with candidates. • New unit code F453.	• Changes have been made to ensure the focus of the unit is more computer-based rather than ICT based, creating two distinct qualifications. • Stretch and challenge style questions are covered in this unit.	• The new specification will have detailed Specimen Assessment Materials on the examinable units.
A2	**Computing Project**	**2510** Mandatory 20% (A Level) Coursework	• All of this unit has been retained - this now forms the new coursework unit, Computing Project.	• This coursework unit have been retained as centre feedback suggested it was popular with students. • New unit code F454.		• There will be detailed information available on the guidelines for Coursework.
A2	**Integrated Information Systems**	**2511** Mandatory 15% (A Level) 1hr 30mins exam	• In the current specification, this was the synoptic unit covering all the learning and skills gained through the other examinable units. This is now replaced with the new unit 3. • New unit code F453.			

continued

New A Level Computing specification for first teaching September 2008

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Candidates must complete four units

	New unit title	New unit code	Benefits to me and my learners	Support
AS	**Computing Fundamentals**	**F451** Mandatory 50% (AS) 25% (A Level) 1hr 30mins exam	• A combination of the theory units from the legacy specification. Generally the GCE ICT content has been removed and the computing content retained.	• OCR is currently developing teacher support, programmes of INSET and working closely with publishers to deliver support to accompany the new specification. • More information on support will appear after QCA accreditation.
AS	**Programming Techniques and Logical Methods**	**F452** Mandatory 50% (AS) 25% (A Level) 1hr 30mins exam	• The practical skills which an AS candidate should be considered to have mastered are assessed by using an examination. The skills concerned are: • Practical analysis techniques like DFDs. • Design features like the sensible arrangement of an interface or the construction of algorithms. • Programming techniques and skills eg repetition constructs. • Evaluation techniques like testing skills.	
A2	**Advanced Computing Theory**	**F453** Mandatory 30% (A Level) 2hr exam	• This is a combination of the theory modules from the legacy specification. The opportunity has been taken to rearrange some of the content and also to drop more of the IT based work which was prevalent in the previous specification. The exam will contain synoptic and stretch and challenge elements.	
A2	**Computing Project**	**F454** Mandatory 20% (A Level) Coursework	• Candidates develop their knowledge and understanding of computer systems and the skills studied in the examinable units at AS and A2. This project is a substantial piece of work requiring analysis and design over an extended period of time, and which is organised, evaluated and presented in a report. • The computing project will continue to be modelled around the concept of following a problem solution for a third party from its inception to the finished article. More credit will be available for the solution to the problem than in the legacy specification and the problem solution will be expected to include a degree of programming.	

The full specification is available online at **www.ocr.org.uk/14-19alevels**